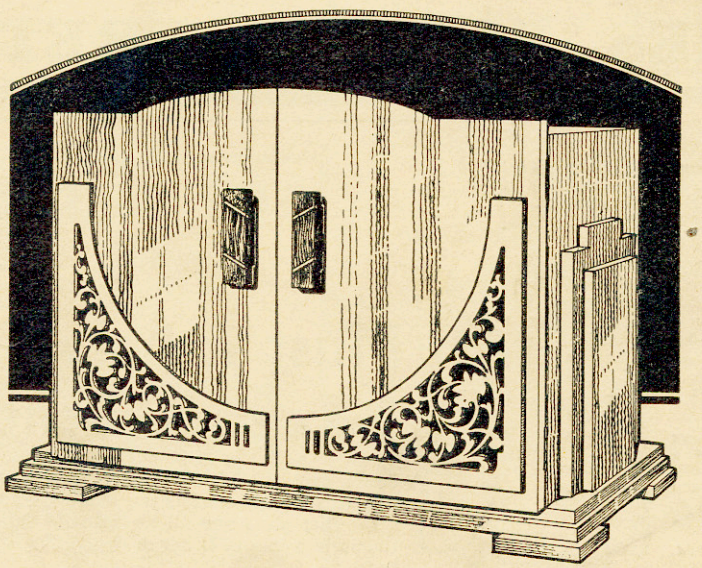
Hobbies WEEKLY

Design Sheet for making this

MODERN TABLE CABINET



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April 23rd: 1938

Vol. 86. No: 2218

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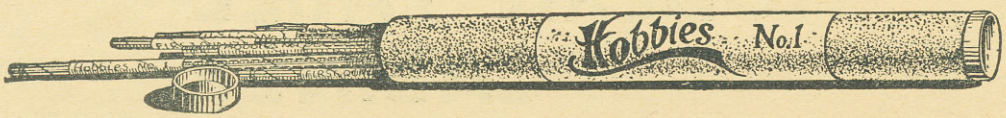

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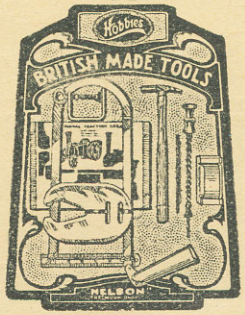


Hobbies WEEKLY
April 23rd. 1938 Vol. 86. No. 2218

MODERN TABLE CABINET

THE making of a cabinet is always a profitable piece of business for there are so many uses to which it can be put, and so many people who are ready to take one, that the design this week is sure to be popular.

As can be seen from the illustration, the style is quite modern, whilst the construction has been simplified as much as possible to make it a simple matter for any amateur handyman to undertake.

All he needs are the usual fretwork tools and a few carpentry tools, besides the parcel of wood supplied for the purpose. This parcel contains mahogany for the main work, with whitewood for the overlay panels, so that when completed, a striking as well as useful piece of work is the result.

The Patterns

In some cases the patterns on the sheet have had to be shown to scale only, and these will have to be marked out on the wood of the correct thickness before commencing. In the case of complete patterns such as the overlay, the door, etc., the paper is pasted to the wood quite flat, and allowed to dry before being cut out.

Remember where the edge of the wood is cut straight in the board, to use this edge as one of the lines of the pattern. This will save you a cutting operation, and also ensure that the edge is straight.

An Important Point

This, by the way, is one of the important points in the construction. See that all the edges are dead straight, and, if you use a fretsaw, that the blade is upright. Construction is mainly of butt joints, so it is essential when parts stand up to each other they should bed quite flat and provide a perfect surface for gluing.

Several drawings are given on the design sheet which provide helpful details as to the construction, and these and this article should be studied carefully before undertaking any of the work.

The completed cabinet is 18½ins. wide, 12½ins. high and 6½ins. deep, thus providing a useful size for a medicine cabinet or a shaving cabinet, or even a small cupboard in the living room for odds and ends. It is intended to stand, being provided with four corner feet.

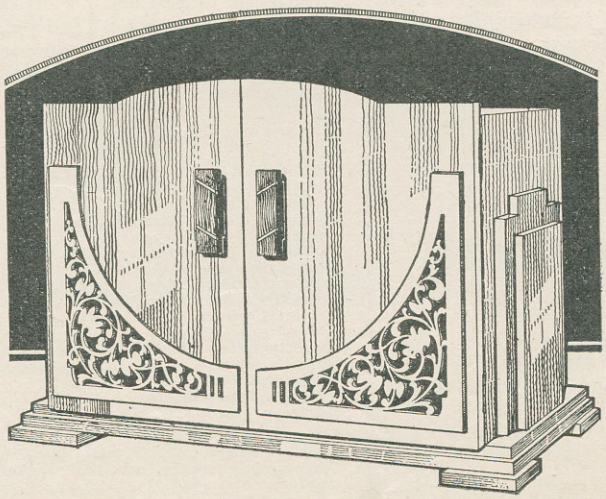
Modern Style

The style, too, is quite unusual, for the doors which lie flat on the front, project above the top of the actual cabinet and are arched to a shapely curve. On the end two simple overlays provide a further modern touch.

In order to provide strength throughout for a piece of work this size, most of the boards are ⅜in. thick, and this allows comparatively wide surface for gluing when the parts are put together.

Of course, the other odds and ends of pieces are of thinner material. The overlay on the front, for instance, is 1/16in. thick, whilst the cover piece on the end is ¼in. only.

The construction of the base is shown by the drawing on the design sheet. The front has each end cut to form a mitre to the sides, but at the



back the ends are square to allow the back strip to go between.

These four pieces are glued to four feet which project slightly at each corner. Be careful to get this framework flat, and immediately you can glue upon it the floor. Add screws if you like from underneath, further to strengthen up the whole framework.

The Framework

Now get out the top and two sides or ends. The hinges are 1¼ins. long set 1in. inwards on the edge of each end as can be seen on the diagram herewith. These recesses can be chiselled out of the edge just deep enough to take the flange of the hinge.

The length of the top rules the position on the floor. Lay the former on the latter so there is an equal projection of the floor each end. Then run a pencil line along and this will give you the position of the sides. The drawing on the design sheet shows the cabinet with a centre partition and a shelf.

The wood for this, by the way, is not supplied

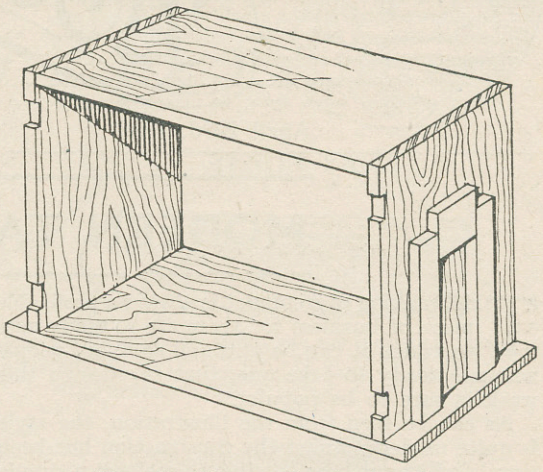
in the parcel, but if you are going to have them it is a good plan to cut out now. The partition, of course, you can have more than one if you wish, is 5 13/16in. wide and 9⅞ins. long. It will serve to strengthen up the whole frame if you put one in.

Stand the two ends on the floor, glue them in place then immediately glue the top in position. A good plan is to have some thin nails or sprigs put through the sides so they can be driven into the top and hold that firmly until the glue is set. The same applies with the centre partition, nails being put through at the top and the floor. Test out with a square, then leave the whole thing to set.

Now for the back. This is a single piece of plywood 15¼ins. long and 9¼ins. wide. But before cutting to that size, test it out with the aperture of the back to ensure it will just fit in snugly.

It is fixed by means of putting angle fillets along the floor, sides and top, as shown by the detail on the design sheet. The triangular fillets are set back just the width of the plywood, are glued to the sides then the plywood glued upon them.

The two doors are shaped as shown, and each has an overlay of 1/16in. wood. This is shown on the design sheet on its proper place, although cut out from different wood. When completed,



The cabinet framework and end overlay

glue it to the bottom outside corners respectively, then fit on the handle No. 6214.

A hole must be drilled through for the spindle 4ins. from the top edge and ⅝in. inwards. This spindle will project behind the wood and when the nut has been tightened on, any additional portion of the spindle can be filed off.

Door Bolt and Catches

Make sure both the doors stand in place properly and fit up close to each other. They should fall on to the centre partition if you have one, and if not, it is advisable to put a little stop on the floor to prevent them being pressed inwards.

The left-hand door should be bolted with a small bolt, then a ball catch fitted in to its edge at the top to hold the right-hand door when closed.

If there is any tendency on the part of the door to pull open or wring, then put two ball catches, one near the top and one near the floor. Further, two cross struts of wood should be glued and screwed behind the door across the grain. These strengthening pieces can be 1¼ins. wide, ¼in. thick and a little shorter than the door itself.

Test out all these parts before actually hinging in position. The hinges have been mentioned and are fitted behind the door and to the thickness of the sides. Be sure to get them to hang

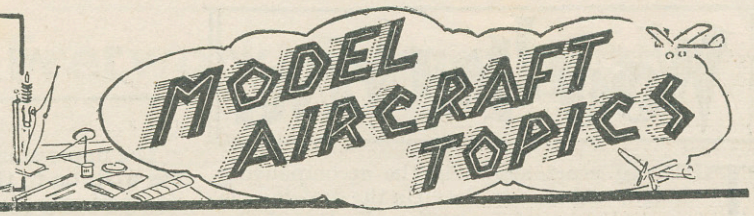
(*Continued next page*)

CONTENTS

GIFT DESIGN—Modern Cabinet

Correspondence should be addressed to: The Editor, Hobbies Weekly, Dereham, Norfolk, and a stamp enclosed with the Reply Coupon from Cover iii if a reply is required. Particulars of Subscription rates, Publishing, Advertising, etc., are on cover iii.

NOTES FOR BEGINNERS



INTER-CLUB, inter-city and international competitions are the order of the day during the summer months and lasting friendships are often formed at these meetings. Whereas too the model 'plane enthusiasts attempt and often succeed in proving in actual contest the superiority of these pet theories that have been incorporated in their models.

Model planes have three types of motive power—rubber, compressed air and petrol-motor. Rubber is the one most in use for several reasons, to be given later. Compressed-air is now very seldom used, but petrol driven models are being used more and more and only the initial expense is limiting their really extensive use.

Types of Machines

Types of machines vary considerably as may readily be imagined, when one considers the terrific scope for individual initiative in construction. Furthermore there are several uses for which a different type of machine is required.

One may want a machine for indoor flying, in which case the weight of the machine is obviously limited to extreme lightness. These planes are invariably constructed of balsa wood (now well known to modellers) with micro film surfaces. The total weight is usually some fractions of an ounce.

Secondly, there is the lightweight for outdoor endurance flying, usually weighing in the region of two to four ounces. These are constructed of balsa wood with jap tissue surfaces.

Thirdly, there is the heavyweight competition model for the inter-club and international contests with a minimum weight of eight ounces. Balsa and jap tissue are again used in their construction but multi-motors and gears account for extra weight.

Fourthly, there is the true-to-scale model, which is an exact replica of the commercial machine. These models although not having the flying capabilities of the non-scale type are wonders of construction and beauty of appearance.

Finally there are the petrol models, scale and non-scale and their duration is only limited by the amount of fuel they are carrying or are allowed to use. The roar of their exhausts, their graceful flying must be heard and seen to be appreciated.

Going back to the types of machines, it is found that the one most generally used for all purposes is the monoplane or single wing.

There are several reasons why this type has more popularity than any other.

Naturally the first thing that appeals is the fact that only one wing has to be built. This simplifies one aspect of construction, but it is only a minor reason.

The major reason is that when the machine is built and taken out for flying the trimming of the plane is simplified in that only one main lifting-surface or airfoil has to be considered. Again, it is far simpler to anchor one wing to the fuselage than two. Also, the vagaries of multi-winged machines are well known to modellers.

Principal Parts

An aeroplane consists of several equally important parts as follows :—

Airscrew, or Propeller, which acts on the air as the propeller of a boat acts on the water, except that in most cases the airscrew pulls instead of pushes.

Fuselage—which is the body of the machine.

Main-wing—which is a cambered lifting surface or airfoil.

Tail plane—a lifting or non-lifting surface used as a stabilizer.

Rudder—for directional alteration and side area balance.

Undercarriage, Tail skid } For take-off and landing purposes.

Now each of these parts must of necessity comply with scientific practices, and a close and intelligent study of aerodynamics is essentially part of the building of model aeroplanes.

This go-ahead science of aerodynamics when applied to model aeroplanes is one of the most fascinating hobbies, and gives to the enthusiast a practical satisfaction of achievement.

(To be Continued)

Modern Cabinet—*(Continued from previous page)*

nicely because it is the fitting of these doors which will make all the difference.

The ornamental pieces on the end are shown in the detail on the design sheet, and in order to save unnecessary wood the under one is built up as a framework of three pieces. Two strips form the sides and a wider piece comes between at the top. A cover piece of $\frac{1}{4}$in. material is put on so it overlaps $\frac{1}{4}$in.

A good plan is to make up this complete part, then glue the whole thing on to the ends of the cabinet. The three pieces A, B and C are glued together with the cover piece over them. If you wish you can, of course, glue them to the ends as shown by the detail herewith, then put on the cover piece afterwards, but be sure to measure the distance off correctly.

The detail herewith, by the way, is of the cabinet without the centre partition, and shows the first framework or carcase which has to be made up. In every case the glue must be applied thinly, and if there is any tendency to warp or pull away, then very often fillet blocking pieces can be added in corners as inconspicuously as possible.

Woodturning

AN EGG CRUET

THE egg cruet shown in the accompanying design, and also in detail in the drawings, is not only a useful article in itself, but the making is excellent practice for the budding wood turner. It can be made on a lathe of 3½in. centres, thus coming within the range of practically all who possess a lathe of any kind.

No special tools are required, simply the ordinary chisels and gouges in general use, while it can be made of any kind of wood, odds and ends as found in almost any workshop, even of the most primitive kind.

The original cruet is made in oak, and is simply oiled with raw linseed oil, but walnut or mahogany will do equally well, If these are used they should be polished, and as this is easily done in the lathe itself, it makes no difficulties in the work entailed.

Scale Drawings

The drawings are all made to the same scale so that measurements can be taken from them, working on the basis of the two circles which carry the egg cups. These are 6½ins. in diam., which in practice has been found a convenient size.

Fig. 1 shows a complete vertical section of the finished cruet. It is made up of the base A, the main stem B, the feet C, the bottom disc D, the upper disc E, the dividing block between discs F, the upper standard G, the pegs forming the handles H, and the egg cup I.

First the base A. This will be turned up either on the face-plate or the screw chuck, the latter probably. If the side of the wood next the chuck is planed true (as it should be), that side will require no further finishing. It is as well, however, to place a thin piece of plywood between the face of the chuck and the wood to be turned, thus preventing the iron chuck from damaging the edge of the tool used.

Moulded Forms

The various mouldings formed on the base are not only shown in Fig. 1, but in plan in Fig. 2, as is the central hole to take the main stem B. This hole is shown at K, and should be at least ½in. deep.

We now have to tackle the main stem B, which runs from the base up through the two discs and the dividing block, and finishes by fitting into the upper standard G. This (before the pattern is turned) is as Fig. 3. The bottom end must fit tightly into the central hole in the base, and the upper part must be turned parallel to fit a standard ½in. boring bit. The reason for this will appear later.

The part shown by dotted lines may be turned slightly smaller in diameter, but very slightly indeed, and the reason for this will also appear later. This stem will, of course, be turned between the centres of the lathe in the ordinary way.

The upper standard will come next, and as this has to fit on to the end of B, and the two have to line perfectly straight, we have to make special arrangements to ensure this.

Preparations

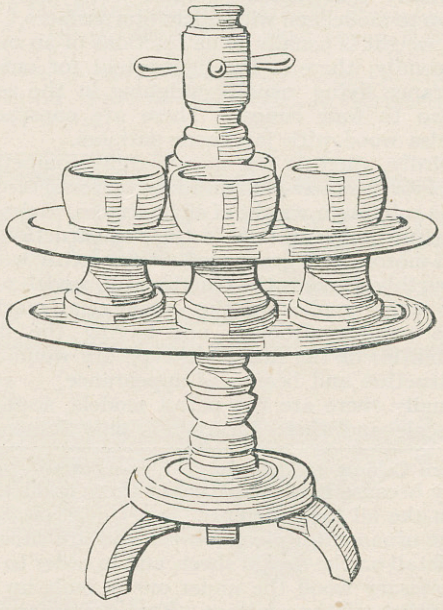
In preparing the rough wood for this part, allow it fully as large as is necessary. In one end bore a hole to take the end of B, then fix a block on to the screw chuck. Turn it down so the rough block from which the standard is to be turned will fit on it fairly tightly.

The back centre of the lathe can then be brought up to it and it will run perfectly true, and can be turned to pattern with a certainty that it will when the two parts are together, appear as though turned up in one part.

Before the turning of this part is finished, however, the holes to take the pegs should be bored. These may be drilled in the lathe, if a drill chuck is available, using the back centre as a feeder. Otherwise they can be bored with a twist bit.

In any case, care must be taken to make them true. The reason for boring them before the turning is finished is to make a clean job, this being difficult if the holes are bored after the turning.

The pegs H are turned by fixing a block on the



screw chuck and turning a hole in it to the depth of some ¾in. Rough pegs of suitable size are driven into this hole, leaving about 1in. projecting. This projecting part is turned into the shape required to form the peg, repeating the process as often as required.

We now come to the discs which are turned up on the screw chuck. The outside rim should be turned first, and the smaller diameter of the chuck will allow of getting at the back sufficiently to complete the rounded edge.

The Discs

The sinking will be done with the gouge and finished with the chisel in the usual way. In this connection a joiner's chisel will be preferable to the turning chisel, as it will have to be used with a scraping rather than a cutting action. The disc should be left the full thickness (apart from the finishing cuts) in the centre, and when otherwise finished, the central hole can be turned.

This latter should be a close fit on the central stem, so when it is passed into position on the slightly reduced part, it will revolve easily.

Differences in Cutting

The two discs are the same with two exceptions. One is that the recess to take the dividing piece must be turned on the under side of the upper disc (that is the plain side), and on upper side of the lower disc. Thus the latter must be turned before the central hole is made in it.

This recess is shown by dotted lines in Fig. 4, and as this drawing shows half of the upper disc, the recess will be on the under side, hence the dotted line instead of solid.

The upper disc, as already mentioned, is exactly like the lower one so far, but as the recess has to be made on the under side, this means that the disc has to be reversed to make it. Thus the central hole will form the means of fixing the disc truly on the chuck by means of a block turned to to take it.

The recesses in the two discs must be exactly alike. At least they should be, or the cruet will not work so smoothly as it should.

Cup Openings

The line L, Fig. 4 is simply a guide in the making of the openings to take the egg cups to get them true one with another, and these openings now demand attention. They could be made in the lathe, but it would require a 6in. centre, and in any case owing to the uneven centre the vibration is severe.

We therefore recommend they be either bored out if a suitable bit is available, or cut out with a fretsaw.

We now want the dividing block F, which will be turned on a mandrel. That is, a suitable block of wood is bored through the centre with a ½in. bit and a piece of wood turned to fit the hole thus bored. The block is passed on to the wood and can then be turned to pattern with the certainty that it will be true.

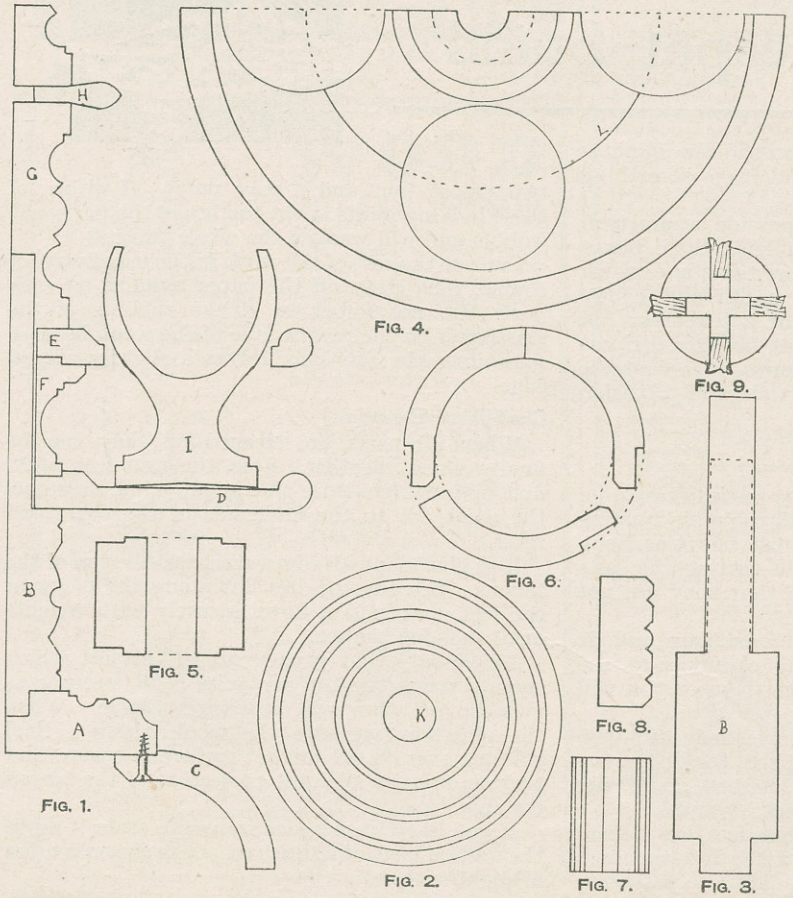


FIG. 1. FIG. 2. FIG. 3. FIG. 4. FIG. 5. FIG. 6. FIG. 7. FIG. 8. FIG. 9.

The block with the hole bored and the lugs to fit into the discs turned, is shown sectionally in Fig. 5. The pattern is not shown, that will come last, and is shown in Fig. 1.

Three feet are required as C, Fig. 1, and these can be made from a turned up circle, the latter being cut up as in Fig. 6. Figs. 7 and 8 show the

EXPLANATION OF DRAWINGS

Fig. 1—Half sectional elevation of finished cruet
Fig. 2—Plan of base.
Fig. 3—Vertical section of main stem (B).
Fig. 4—Half of upper disc.
Fig. 5 — Section of dividing piece (F).
Fig. 6.—Detail showing method of cutting up circle to form feet.
Fig. 7—Face elevation of feet.
Fig. 8—Cross section of feet (double scale).
Fig. 9—Cross section through handle pegs.

LETTER REFERENCES

A—Base.
B—Main stem.
C—Feet.
D—Lower disc.
E—Upper disc.
F—Dividing piece.
G—Upper stem.
H—Handle peg.
I—Egg cup.
K—Recess in base to take B.
L—Guide circle for cutting cup openings.

pattern as seen in elevation and section respectively.

The egg cups are the most difficult part of the proposition, having to be turned out centrally, but with care in the use of the gouge it is not so bad as it appears.

The blocks are mounted on the screw chuck, and the inside turned first, taking fine cuts and using sharp tools. It is as well to make a template to ensure getting them all alike, it is not easy to judge internal work by the eye alone.

The outsides of the cups should present no difficulty. The last operation will be the cutting off at what will be the bottom, and it is as well to cut this a bit hollow as shown in Fig. 1. The cups will stand all the better for this.

Suitable Finish

As this cruet is supposed to be made in oak it should be oiled only, and this should be done before putting together. In fact, it is a good idea to oil each part as it is finished in the lathe. If done while revolving, the oil is applied more evenly than otherwise, and can be rubbed in better.

To put the cruet together, first screw on the feet, spacing them evenly round the base. Then insert the stem in the hole in the base and fix by screwing from underneath. Place the discs in position on the dividing piece, and pass the three parts together on to the upper part of the stem so that the lower disc rests on shoulder made for it.

Then pass the upper part on to the end of the stem so it is close to the upper disc, but not actually pressing on it. Lastly insert the four pegs to form the handle, and the job is finished.

Revolving Top

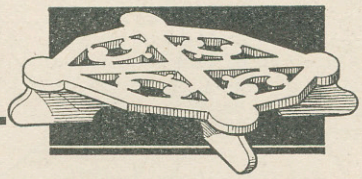
The cruet proper should now revolve freely but without play on the stem. If it does, the upper part can be removed, and replaced after the extreme top of the stem has been touched with glue, the handle pegs being fixed in the same way.

Do not overdo the gluing, a mere touch is sufficient, and see that none gets where it should not be.

If this cruet stand has been made properly, the maker will have reason to be proud of it, being as it is both useful and ornamental.

Should any reader prefer either of the other woods mentioned to oak, and polishing is necessary, the writer will later show how staining and polishing can or should be done in the lathe.

Simple Teapot Stand



IT often occurs that you have an odd few minutes to spare and would like to undertake something with your fretsaw.

The patterns on page 93 provide a practical solution to this for there you have three pieces which can be cut in a very short time, and which when fitted together form a useful and handy little article. It is a stand for a teapot or hot water jug or even a little plant bowl, and if cut out and painted or stained, forms an acceptable little gift or a saleable little article when occasion arises.

Full Size Patterns

The whole of the page can be pasted down to a piece of wood 3/16in. thick with the grain running across. That is, the wood must be 7½ins. long and 5½ins. wide. Take care in cutting the slots and the halving pieces to see that they are not made too large.

The little lugs at B and C must pass and fit snugly into the corresponding openings in the base. Do not attempt to force them or you will split the wood.

On the other hand, do not have them too loose so they will fall out. Be sure, too, to get the top level with the actual wood of the base so the lug pieces (or tenons) do not project beyond.

These two pieces forming the feet are halved together at A, and here again the fretsaw must keep on the inside of the cutting line to make the two pieces join and "stay put." If either of these halving joints is cut too large, the parts will wobble and will weaken the whole thing.

Cut out the rest of the work in the usual way, of course, then clean off the paper remains on each part. Do not forget to give a rubbing of the glasspaper on the reverse side of the wood because sometimes the saw burr leaves a slightly ragged edge.

Good Joints Essential

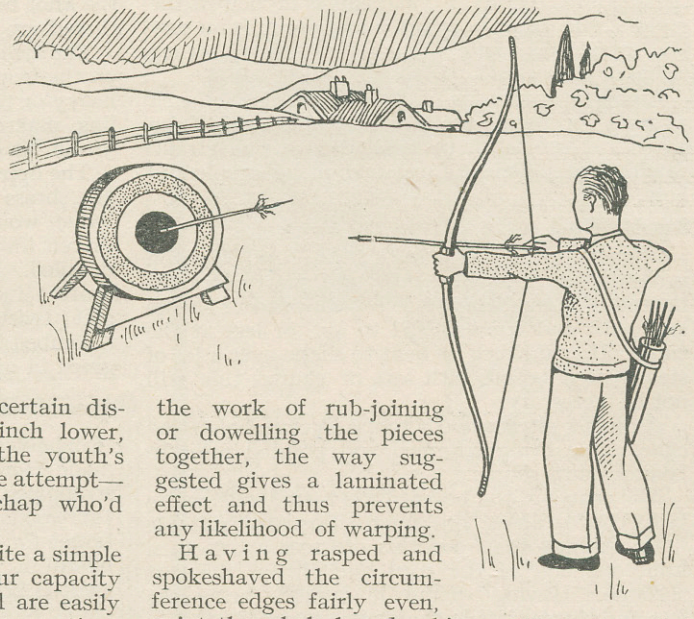
When all parts are cleaned up they can be finally glued together. Join the two feet at A, first by putting a little glue in the joint, then glue the whole lot to the underside of the flat stand itself.

Add glue along all edges except to the top of the tenons. See the top lies flat along the edges of the feet, and hold it down securely with weights until the glue has set.

Do be sure that your joints of the feet which show through the top are quite good, because as you can see, they will be always visible. When the glue has set give the whole thing a final rubbing over on the top flat surface to ensure that there is not the slightest projection of the tenons through.

If you have used a nice fretwood, stain it down then add a coat of varnish or polish if you require a bright surface.

SIMPLE ARCHERY SET



WANT to be a modern Robin Hood or a William Tell? Both, as you know, were adept with bow and arrow, Mr. Tell in particular. Fancy knocking an apple off his son's head at a certain distance with the first arrow! An inch lower, and the arrow would have pierced the youth's temple; so you must never make the attempt—if ever you do manage to get a chap who'd risk it!

The archery set to be described is quite a simple and inexpensive affair well within your capacity as a woodworker. The materials used are easily procured, and there are alternative suggestions should you fail with one or the other recommended.

Board Construction

To make the board or target, obtain four pieces of deal shelving the size and thickness as listed and scribe the half circles on each with the compasses to make a complete board 21ins. in diam., the radius being 10½ins.

Be sure the joining edges are straight and square prior to marking and cutting off the waste with a keyhole saw.

The shaped halves are then glued and sparingly nailed together as seen at Fig. 1. As well as saving the work of rub-joining or dowelling the pieces together, the way suggested gives a laminated effect and thus prevents any likelihood of warping.

Having rasped and spokeshaved the circumference edges fairly even, paint the whole board white. When dry, find the centre of both sides and mark the number of circles on same as shown.

The "bull's-eye" is then painted blue, with the dotted ring in red. The circumference edges could be painted blue or red or left as it is, white.

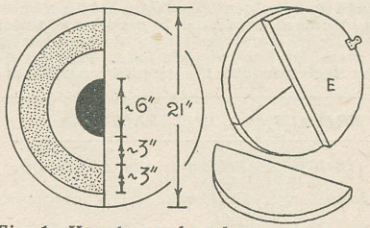


Fig. 1—How to mark and make the board

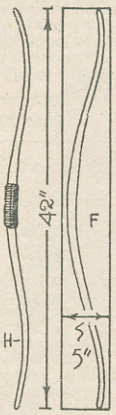


Fig. 2—Details of bow shape

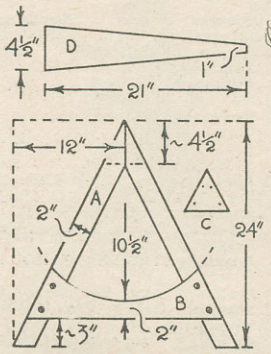


Fig. 3—The support parts

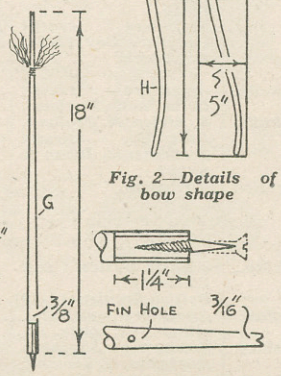


Fig. 4—Details of the arrows

Target Support

A form of easel is suggested as a support for the board. First of all, bevel the top edges of the legs 4½ins., as seen at Fig. 3. When the rail B has been shaped, place the legs together and screw the rail across about 3ins. from the bottom. The top of the legs are held by portion C which is nailed at the reverse side.

The bottom of the legs can then be straightened in true with the rail. Do so by setting a straight lath of wood across same at the tips to mark the guide lines for the saw. The back strut (D) is attached to the back (C) with a 3in. brass hinge or a small metal strut hinge such as used on cupboard doors on the outside.

The finish for the target easel can be either black, grey, blue or red. Grey would not be too dark or too conspicuous to the eyes.

The Bow and Arrows

As you will have guessed from the dimensions of the various parts, this archery set is not a full-size one nor up to professional standards. Consequently, the reduction in the length of the bow makes certain wood inadequate so far as springiness is concerned.

However, if you were to shape the bow from a piece of ¾in. thick ash as seen by H (Fig. 2), this would likely serve, as ash is fairly pliable and tough enough to withstand a certain amount of strain.

Although the wood is ¾in. thick, the centre of the finished bow will be rounded to about ⅝in., with the ends tapering to ⅜in.

The bow shape is very straight—straighter than

the one on the right (F), and this is in view of the grain. The other bow (F) may be cut from any ¾in. wood as elastic is used instead of strong twine or gut.

A couple of strands of ⅛in. square elastic (such as used for tennis trainers and obtainable from any local sports shop) twisted into one strand would give sufficient force and make a splendid bow.

Suitable Wood

If you prefer the "stick" to bend, as you probably do, a long, slender and pretty straight branch of a tree would serve if stripped of shoots and bark and spokeshaved to ⅜in. or less at the ends. It could then be bent to shape over a jet of steam; if it is soft with sap, of course, this will not be necessary.

A further alternative is to use thick upholstering cane, same being trimmed and pointed prior to bending into shape.

The centre of the bow stick is bound with white twist cord to about 4ins. long. First drill suitable holes through the wood this distance apart, then knot one end of the cord and thread the rest through. Having wound it around, bring the free end through its hole and glue in same.

Binding

The catapulting twine is bound at the ends with strong black thread or just twine for about 2ins. Knot first one end of the bow twine, then bring it up and over and down the bow end, then bind (see illustration).

The other bow end is treated similarly, the twine being pulled and bound sufficiently taut, the knot being tied. The free ends of the binding thread are glued in place.

The arrows are simple things, but much depends on the length and weight. They must not be too heavy or too long. An 18in. length of ⅜in. dowelling makes a decent shaft. Plane it away to 3/16in. at one end and make a V-cut (see Fig. 4).

The opposite end is tipped with an 1¼in. piece of ⅜in. brass curtain tube, but tight windings of twine would do. A 1½in. by 6 iron screw is driven into the end and then filed to a point as detailed. To make fins, drill a hole through the shaft 2½ins. from the end and insert a piece of soft twist cord, same being unravelled and "combed" out to catch the wind. It can be glued in or bound.

Arrow Holder

A holder for arrows is not essential, but can be made from a large postal tube and leatherette strapping, one end being stopped with a disc of ½in. wood. A hanger is screwed to one side of the target for attaching to a wall. It also keeps the board in place on the support rail. The back strut is held out with cord or chain.

MATERIALS REQUIRED

A—4 pieces deal, 28ins. by 2ins. by ⅞in. thick.
B—1 cross rail, 22ins. by 5ins. by ⅞in. thick.
D—1 back strut, 21ins. by 4½ins. by ⅞in. thick.
C—1 strut piece, 4½ins. by 4½ins. by ⅞in. thick.
E—4 board pieces, 11ins. by 10½ins. by ⅞in. thick.
F—1 bow piece, 42ins. by 5ins. by ⅞in. thick.
G—3 dowels, 18ins. by ⅜in. diam.
1 brass hanger. No. 6176.
1 hinge, 2½ins. long, or a small strut hinge.

HOBBIES LEAGUE CORRESPONDENCE CLUB

These Members of Hobbies League would like to get in touch with other readers and so form pen friendships which will undoubtedly prove interesting to all. In this way, one has a wide circle of friends and increased knowledge in people and places, not only in one's own country, but all over the world. Members should write direct to the addresses given, stating their full address and age, adding any hobbies in which they are interested. Hundreds of members have already taken advantage of this Correspondence Club in this way and others who wish to do so should notify the Registrar with the necessary particulars.

NAME	ADDRESS	WANTS FRIENDS	INTERESTS, Etc.
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K. Viney.	*13, Fryent Grove, W. Hendon, N.W.9.*	*British Isles age about 12.*	*Fretwork.*
Charlie Lim.	*47, Northam Rd., Penang, S.S.*	*U.S.A., S. Africa, Cyprus and Europe. 15-16.*	*Stamps and Fretwork.*
R. S. Armstrong.	*Aylsham, Saskatchewan, Canada.*	*Anywhere except Canada. Boy 12-18.*	*Stamps and Anything Interesting.*
I. P. Basopia.	*Manilal Mohanlal High School, Princes St., Ranchor Lines, Karachi, India.*	*Anywhere.*	*Stamp Collecting and Drawing.*
S. Khan.	*1989, Convent St., Camp, Poona, India.*	*Anywhere except India and England.*	*Anything.*
A. Khan.	*1989, Convent St., Camp, Poona, India.*	*S. Africa, N. Zealand, Australia, Straits Settlements, Japan & Egypt.*	*Fretwork, Stamps, etc.*
F. A. M'bulu.	*c/o F. Agu Esq., Native Administration Office, Nsukka, S. Nigeria.*	*Anywhere.*	*Photography, Stamp Collecting, Games and Outdoor Sports.*
J. Hall.	*34, Vogel St., Hawera, New Zealand.*	*Anywhere.*	*Cigarette Cards, Stamps and Fretwork.*
A. X. Mendes.	*62, Meuram St., Kandivli, B.B. & C.I. Ry., Bombay Suburban Dist., India.*	*British Isles and Elsewhere.*	*Anything.*
W. J. Kwong.	*39, Bukit China, Malacca, S.S.*	*British Empire (10-14)*	*Fretwork and Photography.*
D. Bedwell.	*480, London Rd., S. Lowestoft, Suffolk.*	*Anywhere abroad, either sex, over 13.*	*Stamps, Coins, Curios, Woodwork.*
L. E. Lawrance.	*Burnt Lodge, Wormelow, Herefordshire.*	*Western or Southern Australia, N. Zealand, and Egypt.*	*Anything, especially Fretwork.*

FRETWORK

A further article of hints and tips to all using fretwork tools

WE have already touched lightly in this series on the question of using alternative material as a little change from wood, and find there is a good deal of interest in the matter.

Possibly because of the popularity of aeroplanes, aluminium is a metal which has come considerably to the fore, and sheets of it are now obtainable in quite thin substances which prove of service to the fretcutter.

We are not suggesting, of course, it can be used extensively to take the place of wood. It is more difficult to handle in large pieces, and the question of joints or bends is a little beyond the ordinary amateur.

Uses of Overlays

On the other hand, small pieces make very distinctive overlays. It must not, of course, be overdone, because if a large design is cut it will be so prominent as to become ugly. Little miniature designs are particularly appropriate, and some of the previous patterns given in Hobbies Weekly can be used.

The metal, too, can be used for little keyhole covers or for monograms or for simple shields on boxes. The metal is obtainable from most model aeroplane stores and can be polished up quite brightly by the use of emery paper finished off with a cloth polisher.

It will be noted, of course, that the metal must be cut with metal-cutting fretsaw blades. They

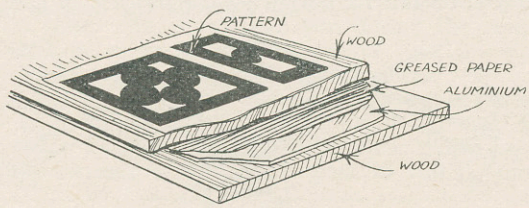


Fig. 1—How metal is cut between boards

are obtainable in three or four sizes at 7d. a dozen. These have their teeth very much closer together than in the ordinary woodworking blade, and so form a continuous stroke as it passes through the work.

Fixing Design to Metal

In cutting metal, some form of lubricant must be used to prevent the blade running hot. A good plan is to put a piece of greased paper over the work or between the two pieces of board so the saw is lubricated as it passes along. Or a spot of grease put onto the blade itself occasionally will help.

The procedure of fixing the design is naturally different, because unless you use a special fixative it is difficult to fix the paper to the metal. If you really must do so, then use six parts of gum arabic, three parts of alum, three parts of sugar of lead and 15 parts of cornflour.

The gum arabic is dissolved in hot water first, the flour, sugar of lead and alum are also dissolved in water, then the whole added together. This paste is used the thickness of cream, and will be found useful for almost any metal.

Metal for Overlays Xylonite—Enlarging Patterns—Fittings

An easier plan, however, is to place the metal to be cut between two boards. Paste the design down firmly on to a thin sheet of plywood, put the aluminium underneath, then another thin board beneath that. The whole three pieces are nailed together round the outer edge, and with one or two in the waste pieces.

Drill Nail Holes

Remember, by the way, to drill the holes before you put in the nails. If not, as you hammer the nails through the metal, a little indentation will occur or you will blunt the nail itself.

The nails should go right through the work and be sufficiently long to allow for turning up on the underside. The boring of the hole can be done with an ordinary fretwork drill. A drawing is given herewith at Fig. 1 of the various layers of this work, and it can be seen that the greased paper is put between as previously mentioned.

Then, of course, when the cut-out metal is finished it can be cleaned and added to the work in the usual way. It must be affixed with screws, and as they cannot be countersunk into it, the round-headed variety are needed.

The Use of Xylonite

A number of readers, too, have been interested in the suggestion of the use of xylonite, and this is similar in its use to the points raised for metal. Here the work need not have the metal cutting saw because the material is really quite soft. Indeed, if the outline is plain it can be cut with a pair of scissors.

In using the fretsaw blade, do not rush along too quickly or you will find that heat will be generated and the stuff will start to scorch.

If the material happens to become curled or buckled, you can easily straighten it out again by dipping it into hot water then putting it flat

on to the table or bench with a thick board over it weighted down. When the material has become cool again it will have retained its former flatness.

Be careful, too, in using xylonite, to see that you do not scratch the surface which is highly polished.

In affixing this xylonite, too, the ordinary glue may not be found satisfactory, and here you will need a clear cement which can be easily made from 2 ozs. of gum arabic, 1½ ozs. fine sugar, ½ oz. powdered starch. Put the ingredients into a porcelain jar, mix with water and allow it to stand in boiling water until it becomes clear and thick as cream. Then if you want to prevent it turning sour, add a few drops each of methylated spirit and oil of cloves, but remember in any case to keep the mixture well corked.

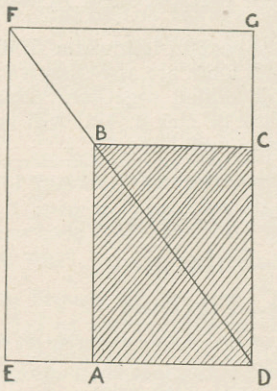


Fig. 2—Enlarging a rectangle

This cement will fix the xylonite to the wood quite firmly, and indeed it is a useful household cement for many ordinary purposes.

It sometimes happens that readers obtain an order for an article in fretwork which must be made to a certain size. A doll's house, for instance, is needed twice as large as the design obtainable. Or a table cabinet is wanted 1½ times as large.

So far as the plain rectangular pieces are concerned, the increasing to scale is comparatively straightforward, and the parts can be drawn out with rule, pencil and compasses straight away.

Altering a Rectangle

The correct method of reducing or increasing proportion of a rectangle, by the way, may not be known to every reader, and the diagram at Fig. 2 will explain this. The size of your oblong is shown by the lines A, B, C, and D and you want to make it a certain proportion larger. The actual size does not matter but can be measured off to any dimension.

Draw a line diagonally from D to E, and extend it right away. The base line D to A can also be extended, and the upright line D to G and onwards. Mark along the base line the dimension of the enlarged side required, then carry the line upwards so it cuts the diagonal at F. Then by running it across to the upright line at G, you have your enlarged oblong as required.

When you get a more intricate design, you can rule it off in squares and increase the size of these on the larger paper as needed. This was explained recently in our issue dated February 26th.

The Pantograph

Another method, and possibly an easier one is the use of the pantograph, an instrument of extending and movable arms as illustrated at Fig. 3. This is sometimes made in wood, but the one shown is in metal, supplied by Hobbies Ltd., with special clips and numbering so you can automatically increase your sizes two, three, four, five, six or eight times the original.

The right-hand end of the pantograph is screwed or held down with drawing pins to the bench or table. The design to be enlarged is put under the steel pin in the centre, whilst the left-hand end of the pantograph holds the enlarging pencil.

Drawing the Design

Guide the steel point over the actual design with the fingers, noticing at the same time that the pencil on the right is redrawing it larger as required.

The pencil, of course, must press on to the paper as much as possible, but even so, it may be necessary to go over the outline afterwards to thicken it up. The clips and instrument slide easily over the paper concerned, and very little experience is needed before one is able to enlarge drawings quite successfully.

The joints of the metal pantograph, by the way, should always work as freely as possible and a spot of oil may be required occasionally to allow the universal movement required. Moreover, the metal parts should be prevented from becoming rusty by smearing them with oil when they are put away after use.

Fixing Fittings

One final word before we close this week's notes. That is, that a number of workers are too haphazard in their fixing of hinges, door knobs and similar metal ornaments. Whether it is because they have got tired of the work, or whether they think these can be "slapped on" anyhow, is immaterial.

The fact remains that as much pains should be taken over these as over any other part. Indeed, if you do not fix hinges correctly the door or lid

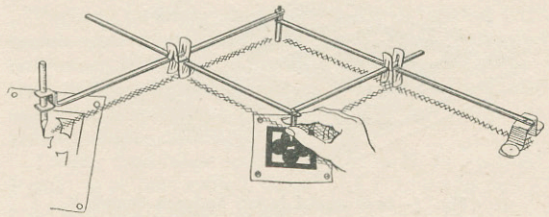


Fig. 3—A pantograph in use enlarging a pattern

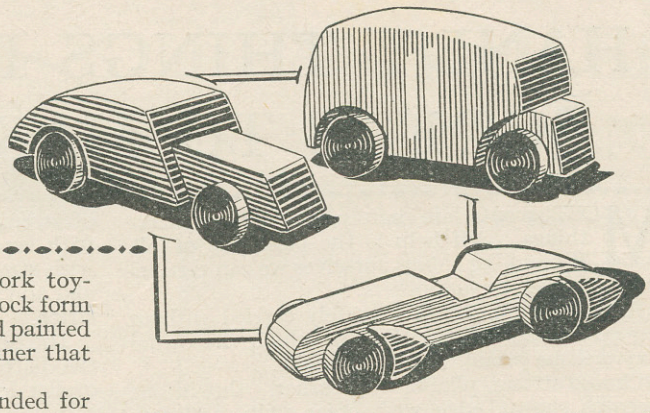
will not swing properly and will probably burst the screws out or split the wood.

Lay all these little metal additions temporarily in their proper place, and pencil round them lightly in order to test out whether they are accurate.

In putting on a keyhole cover, for instance, lay it in position and notice whether it is straight or aslant. Then run a pencil through the holes at the corners in order to mark on the wood underneath the position where the screws or nails are to come.

Then take the metal away, drill a small hole and finally return the ornament into its place and screw in position.

MINIATURE BLOCK TOYS IN WOOD



HERE is a suggestion for our fretwork toy-makers. Simple toys made up in block form so that they are easily assembled and painted up, and fitted with wheels in such a manner that they can be easily taken off.

These sturdy little toys are really intended for rough usage, and they are highly suitable therefore for the youngsters.

There is the latest streamlined saloon car (Fig. 1), the Sports Model (Fig. 3) and the large delivery van (Fig. 2). They could be almost any size say, from 5ins. long to 15ins. and the squared diagrams given is all that is necessary in getting out the parts. For models, about 5ins. long, wood $\frac{3}{8}$in. thick is for the main body parts with $\frac{1}{4}$in. stuff for the side sections and the streamlined blocks on the sports model.

Larger Models

If, however, these models are to be longer, then the thicknesses of the parts must be greater. Or, again, the same thickness of wood could be used, only there will be a greater number of each piece to be glued up to make the proportion of length and width.

In the diagram at Fig. 4, showing the assembly of the saloon car, there are two $\frac{3}{8}$in. thick pieces for the main body part, with a $\frac{1}{4}$in. piece each side for the door section.

If a model twice this size is to be made up then each of the two body sections must be $\frac{3}{4}$in. thick, or one piece $1\frac{1}{2}$ins. thick would answer equally as well. The side pieces in this latter case would then be $\frac{1}{2}$in. thick.

Wood to Use

The squares shown are 1in., so it is easy to enlarge to any size required.

American whitewood or satin walnut would be suitable, while perhaps if a very large toy is being made, ordinary deal should be used.

The method of fixing the wheels is shown in Fig. 6. Deep grooves about $\frac{1}{4}$in. wide by $\frac{1}{2}$in. are cut in with the fretsaw, the proper positions for them being, of course, previously set out. Make the curved parts of the grooves nicely smooth with glasspaper wrapped round a piece of dowelling, and afterwards rub carbon into the grain of the wood. A soft lead pencil will answer well for this.

The wheels are round discs of wood cut proportionately to suit each model, and with 3/16in. holes in the centre.

When cutting off the lengths of dowelling to form the axles, allow about $\frac{1}{4}$in. clearance. Test the axles in the slots, see they run true, then afterwards screw on small shaped cleats (Fig. 6) to hold them in place.

These consist of either hard wood or brass carefully bored and put on with roundheaded screws.

Painted to Finish

These little toys could be painted up gaily in red, blue or green enamel and if desired, windows doors and the fittings perhaps put in.

Some workers there may be who will be ingenious enough to make these toys up so that the various "layers" are held together by means of stub dowels and thus easily taken apart and reassembled. The youngsters are thus called upon to build up their toys and so get more fun out of them.

Some of the nicely turned and painted wooden wheels sold by Hobbies, and ranging in size from $1\frac{1}{2}$ins. to 5ins. would be fine for these models. These series are No. 604, and a full list of sizes and prices can be had on request.

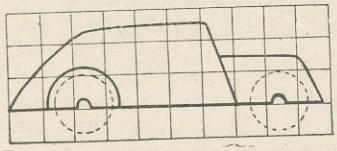


Fig. 1—Outline for the private car

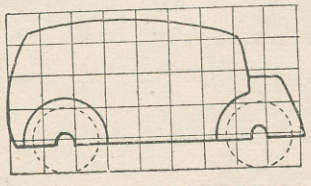


Fig. 2—A delivery van shape

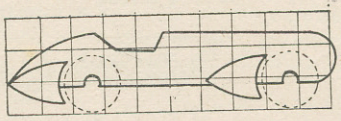


Fig. 3—The sports model

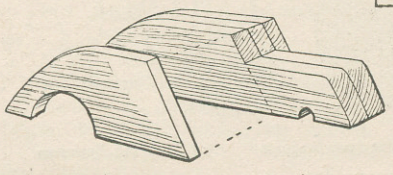


Fig. 4—The built up construction

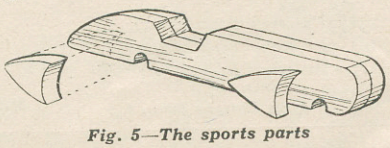


Fig. 5—The sports parts

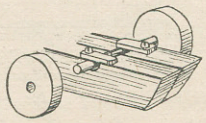


Fig. 6—Wheels and axle fitting

HANDY THINGS FOR SCOUTS TO MAKE

MOST scouts are handy, and like to make things. Self help is the best help of all. By making things ourselves we can certainly help ourselves, and others.

A scout knife cannot be safely carried without a good strong sheath. One of which the owner may well be proud, is easy to make.

Choose strong, pliable calf leather. Cut in one piece as shown, edge with brass strip, perforate with an awl, and rivet. Making up in this manner is a very simple process, and such an article will last a lifetime, besides being absolutely safe for carrying the sharpest blade.

Safety Axe Protector

An axe should be kept in good condition, and sharp. For protection, and safety, the blade needs a strong cover piece. The best material to use is strong pliable calf leather.

Cut in one piece and make up as shown, the sides being studded or leather thonged, and the base metal edged and riveted, with a large press button fitting to complete.

A belt and purse can be made in a very simple manner from two perforated strips of strong pliable calf leather, as shown. The belt is fitted with a strong leather covered buckle of suitable size at one end, and eyeletted perforations made at the other end for adjustment.

Despatch Carriers

For a despatch purse for your belt and one which will hold all you need, cut in two pieces, with extra gusset cuts, as shown, using pliable calf leather. Sew strongly by hand, or lace the edges with good leather thongs or laces. A belt loop is also fitted, the work being finished with two strong press buttons.

For Scotch Scouts, a sporran can easily be made of strong plain calf leather. Cut in two pieces, with separate gusset cut, and hand sew or lace with strong thongs. Fit two large press buttons, and add the waist strap made from plaited leather strips.

The deficiency of the cycle battery lamp is that the battery does not give long service. If the cyclist does not mind carrying a little extra weight, a really serviceable outfit can be made by using two large bell battery cells of the so-called dry type.

Cycle Lamp Batteries

These can be fitted in a wood carrier box and carried in a convenient position. The box should be equipped with a reliable pressure contact toggle switch of small size. Well covered and insulated twin flex wires can be carried neatly via the saddle crossbar, to the front fork stem, and thence to the handlebar, where a separate head-lamp fitting can be bracket fixed.

This is obtainable, with good large convex bull's-eye lens and polished dome reflector and cycle lamp bulb, or the handy scout will no doubt be able to make this too from a few spare parts.

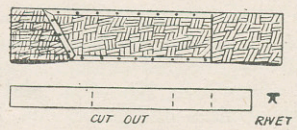
The battery box switch will be easy to get at when riding, and is far more effective in use than the type usually fitted on cycle lamps, besides having the advantage of being instantaneous in action, and positioned away from direct accessibility to the rain.

The battery box should be so constructed as to keep out moisture which so quickly ruins cells and wood is preferable to metal if it is well painted or enamelled.

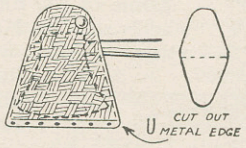
Rough-work Mits

Use strong split hide for these and cut in two

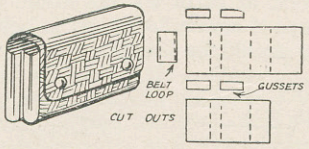
(*Continued foot of page 86*)



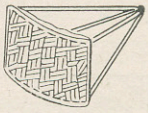
A knife sheath



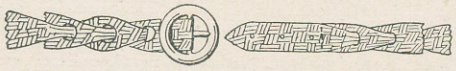
Axe sheath



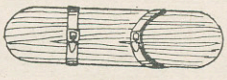
A Despatch carrier



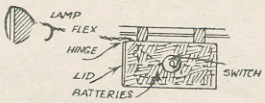
Knee or shoulder pad



An interlaced belt

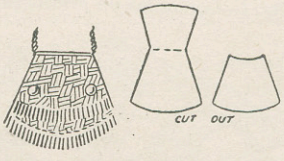


A mud shoe



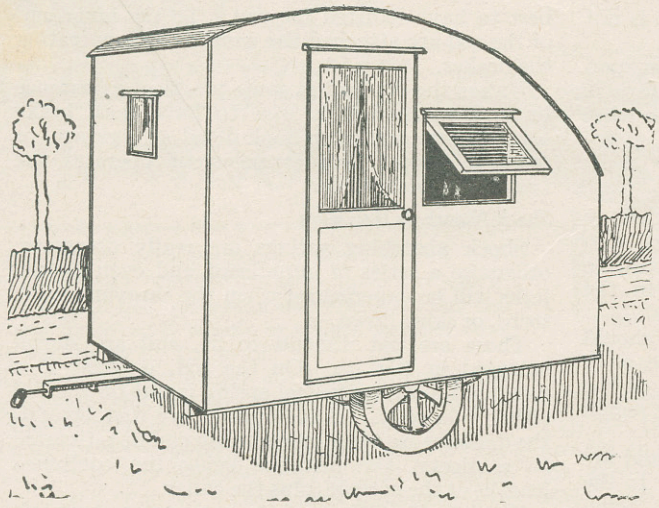
A cycle battery lamp

Mit for rough work



A Scottish Sporran

A TRAILER CARAVAN



Concluded from last week

HERE is the concluding portion of our detailed instructions for making the modern streamline type of caravan shown above. Copies of the first portion of the article are obtainable for 3d. post free.

The window and door openings should be lined with strips of wood, ⅜in. by 1½ins., as in Fig. 13. These are wide enough to cover the edges of the plywood and extend ¼in. beyond.

Just above door and windows glue a bevelled weather strip to throw off the rain and prevent it trickling down them.

The door, and side window frames, are halved together at the corners, glued and screwed. They can, of course, be mortised and tenoned together if a better job is desired. The middle rail of the door is notched in, and glass beaded in the upper frame, as in Fig. 14. The rails of the door, by the way are of 3in. wide stuff, sides of 2in.

A diagonal brace is fitted in the lower frame of the door, rising upwards from the hinged side. Fit the brace ¼in. in from the front so that a plywood panel can be let in to fill the opening. This is nailed to the brace and to strips of wood, or beading, fixed to the sides, and should be flush with the outer face of the door.

Hanging the Door

Hang the door with 3in. iron butt hinges and fit suitable handles and catches. Draught excluding strips, ⅜in. by 1½ins. are nailed along the sides and top of the door opening inside, and round the window openings. These overlay the openings by ⅜in., see Fig. 13, showing strips overlapping the window.

The glass in the window frames is beaded in, like that of the door, and the frames should be hunged to open and fitted with stays.

Windows

Always see that the windows are shut while the caravan is in motion, or a passing vehicle may catch them with damaging results.

No frames need be provided for the front and rear windows as these are not required to open, being simply view points. Just bead the glass in the lined openings.

Before proceeding with the roof, the wheel boxes can be fitted. These consist of a frame of wood fixed over the openings in the floor, and covered with a top board, as in Fig. 15. They need only be high enough to clear the wheels by say 3ins. so as to offer as little obstruction as possible.

The caravan should be mounted on the wheels first and a couple of passengers stand inside to see how far the springs will be depressed under weight. The required height of the wheel boxes can then be measured. These will probably extend a little beyond the doorway, but that cannot be helped.

Interior Fittings

It will be found convenient, also, to fit any interior lockers now and other wood fittings. This done, the plywood roof is nailed in place. Let it overhang all round about 1in. and use a few screws near the front and rear ends to hold the material well down to the curve.

Lay the plywood with the grain running from one side of the caravan to the other, it will then bend easier. This completes the caravan, which is now ready for painting.

Creosote and Paint

The floor frame underneath is best creosoted. The roof is coated with paint, rather thickly. On this a covering of calico, or similar material, is well rubbed down. Allow an 1in. all round to turn under the overhang of the roof. This turn under is best glued to ensure it sticking well. Now paint the roof two coats best lead coloured paint.

Three-ply is of a porous nature, so the outer woodwork should first receive a coat of pink priming colour to help fill up the grain.

Over this apply two coats of paint, good quality, of any desired colour and finish with a coat of varnish. The interior woodwork can be varnished or painted white and all iron metal fittings, outside and in, finished with black enamel, or brunswick black.

The Wheelwork

The wheelwork necessary for the caravan consists of a pair of small car wheels with springs and axle. If it is intended to buy new ones, the proposed wheel centres must be stated.

The wheel centres, or tracks, is the distance between the wheels measured from the centre of the tyres, where they touch the ground in fact,

in this instance 4ft. 6ins., but an inch or so is not important.

Where expense is a serious consideration, and to most of us nowadays it is, a good plan is to take a friendly garage hand in confidence and see what can be done with second-hand parts.

Wheels and Springs

Generally a pair of wheels can be got cheaply enough, with decent tyres. The springs also sometimes. An axle, of 1¼in. sq. steel should be ordered to fit. This axle is best made in the sunk pattern, as in Fig. 16.

If of the straight type, then the springs should be underslung, that is bolted below the axle, as in Fig. 17. This is necessary as the height of the floor frame above ground should be in the region of 12ins. or so.

Springs with five to seven leaves will do and are bolted to the axle as in Fig. 16 or Fig. 17. In the latter case, a hardwood block, 2ins. thick, being interposed between axle and spring.

The springs themselves are bolted each end to the runners on the floor of the caravan. If the runners are not already fixed to the floor they can be fixed now, but the bolt heads should be sunk flush with the floor boards and not allowed to stick up.

The wheels are not mounted to be in the centre of the caravan but at a distance from the front shown in Fig. 4. Brakes will be necessary by law, and when buying the wheels this fact should be borne in mind. Any kind of reliable brakes will do as long as they can be operated by wires or rods from the tow bar.

The Tow Bar

The tow bar, Fig. 18, can be a length of angle steel, bolted to the bearers. At points a-b right-angled brackets of mild steel are fixed. These are bored for the tow rod, a length of ¾in. dia. mild steel.

The outer end of the rod is threaded for the hitch hook, the latter being bought ready made. It is best to have it fitted for you. To the inner end of the rod are attached the wires or rods operating the brakes.

Unless the reader has some practical experience in such matters it is wise to have both brake attachments and hitch hook fitted at a garage, or machine shop. This arrangement operates the brakes automatically.

Shock Absorbers Necessary

Shock absorbing springs are really necessary, otherwise a series of unpleasant and even violent jerks will be experienced when the caravan starts, stops, or slows down.

These are not difficult to fit, and are shown enlarged in Fig. 19. On the rod, a collar C is fixed and a strong helical spring is put on the rod either side of it. If the springs are first bought, the distance between brackets a-b can be estimated to a nicety, the distance being the combined lengths of the springs, plus the collar.

The interior fittings of the caravan are best left to individual requirements, but a few suggestions may be helpful.

Bed-Seats

Some fellows will not consider beds in any way necessary, especially if they are used to hard camping, but, as the caravan may at times be loaned to others, with no such spartan ideas, provision for same would be wise.

Of course, a pair of folding beds could be provided, but a better arrangement is to make a couple of frames, padded on top, and hinge them to the sides of the caravan. These could be let down as required for beds or seats.

Owing to the doorways being in the sides, each frame should be in two halves, the rear half folding up flat against the side and the front half lifting up to clear the doorway.

Lockers can be arranged under the bed frames, also at the rear end, under the window. These, with a folding, or let-down table at the front or forward end will constitute all the furniture really necessary.

Things to Make—(*Continued from page* 84)

pieces to hand measurement, and machine sew. A pair of these will save your hands when doing a number of rough jobs, such as woodcutting, or hedging, although in many instances, only one mit will be required.

Knee or shoulder pads are very useful items. The former is used for work which calls for a deal of kneeling, not only saving wear on clothes, but also the knees which are easily injured. The outer piece is cut from strong stiff calf leather, the inner section being padded with blanket material and sewn on. A strong elastic band is fitted as shown so the pad is easily slipped on and off.

The shoulder pad is intended for use where heavy, hard, or awkward shaped goods are carried on the shoulder, such as bumpy logs and so forth. With padded shoulder comfort on the lightly covered shoulder blade, one can carry double the weight, twice as far, for nothing is more agonising than a bruised shoulder which gets more painful at every jolt.

The pad is made in the same manner as described for the knee pad, and the same pad may serve for both purposes, in this case, being simply slipped over the armpit.

Mud shoes are a simple, but extremely useful idea. With a pair of these on you will not sink deeper into the mire with every step you take, when you have to traverse bad tracks.

Simply cut two wood slats, and fit with straps and buckles as shown. The use of these will make all the difference to the cleaning of your footwear, and give them longer life.

By the way, the Editor can tell you where bundles of leather pieces, calf, or assorted press buttons, etc., are obtainable.

CHOOSING A CAMERA

THERE are doubtless quite a number of readers who would say that the choice of a camera depends on the amount of money the individual has got and how much can be spared for this purpose. To a very great extent that is correct, but it does not convey much to the person who has not yet started photography or to one who knows but very little about it. Neither is it altogether helpful to the person who, so far, has only taken holiday snaps with a very cheap form of box camera and now has become really enthusiastic and, therefore, wants something that will enable better work to be done and also of a more varied type.

This article will be found interesting to beginners and advanced workers alike for it will review several types of cameras from the cheap to the very expensive and point out the special features of each and where those of the more expensive machine are an advantage and justify the extra cost.

Quality and Price

It is, of course, obvious to everyone that it is not possible to do the same high quality work with a camera costing 12/- as with one which sells at as many guineas. At the same time we all know that some topping little pictures have been taken with cheap cameras and valuable prizes been secured in competitions by raw beginners.

First let us give a word to the Reader who is going to take up photography this season for the first time. We should like you during the next month or so to ascertain if one of your friends happens to have an old stand camera. Never mind if it is 20 or 30 years old, borrow it for a time.

Get a quarter plate one if possible, it will not be so expensive for you to work as will be the larger sizes, and plates, unfortunately, cost more than films today.

The reason why this suggestion is made is, that the beginner can gain a much better idea of the initial stages of the hobby by the use of a camera where the image can be seen in a focussing glass at the back of the camera. He will realise how easy it is to throw the picture out of focus by the slightest turn or twist of the knob controlling the racking action.

Making a Picture

He will learn also quite a lot about composition quite unconsciously, but the fact remains that when one can see the actual pose of the individual or the layout of the landscape on the focussing glass and knows that this is the same size as the negative will be, certain definite information is being gained which it would be difficult to gather and understand if, when instead of a focussing screen, there is only a small view-finder the size of a three-penny piece.

Assuming that you can afford the money or can spare say, about 3 guineas for a camera, for this sum it is easy to get a really good class instrument, one that will answer all the requirements of a beginner and probably last him three or four years without any desire to make a change.

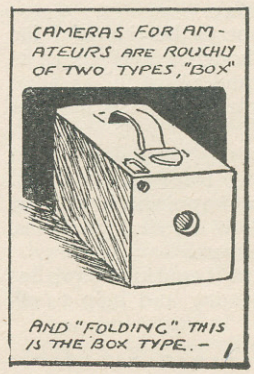
Points to Look For

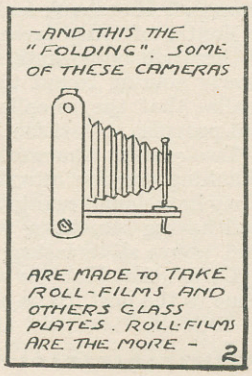
What ought you to look for in a camera at this price ? It will be of the folding variety and most likely take a spool of film giving eight exposures $3\frac{1}{4} \times 2\frac{1}{4}$ or twelve of $2\frac{1}{4} \times 2\frac{1}{4}$. The loading is done by either taking the back off or folding it back in book form.

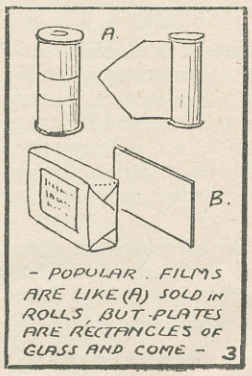
The roll film is then placed in a small pocket on one side and rolled into a pocket on the other side as the exposures are made. Opening the front,

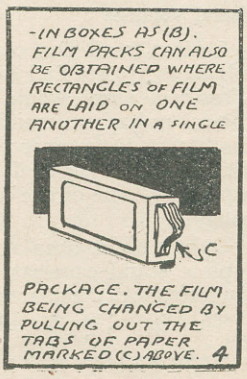
Our New Feature Photo Strip . . . .

(To be Continued)









we should find a view-finder which should be capable of turning at right angles when wishing to take horizontal pictures.

At the Front

The front of the camera is made to extend to a series of distances and it is particularly necessary that these distances be accurately recorded, otherwise the pictures will be out of focus. Therefore there will be found a small indicator plate marked with so many feet or meters and when the pointer attached to the camera reaches these figures, it means that the focus is set to that distance. Then there is the lens and shutter, for the price we are considering the lens should be of fairly good quality and will have stops ranging from F7.7 or perhaps F6.3 to F32 or F64 and the shutter speed from one second to 1/250th of a second. Some makes will probably have one or two other 'gadgets' but even without any other special item such a camera is a good one with which to make a successful start.

The Cheaper Kinds

Let us now consider a cheaper class, we cannot all manage the sum of 3 guineas, much as we would like to, so we want something just as good at half the price. Well that may not be possible, but, there are some really good and very efficient makes at a couple of guineas which you will find give satisfaction for they are well worth the money.

Those cameras appear to be much the same as those at twice the cost. But it is the extra finish or the greater scientific adjustment which has been given to the more expensive that brings about such a variation in price and when that £25 instrument is being made every part of it is under the care of highly skilled workmen.

Good Results

Such a comparison must not, however, discourage the person who has only the cash for a 2 guinea or a 10/6 camera. These cheap ones are extraordinary good value. They can be used for most subjects, they are particularly good for the type known as 'Happy Snaps' which are mostly out-of-door subjects taken when there is a very good light.

The owner can quickly learn its capabilities because it is constructed on very simple lines and without too many parts which might tend to confuse the user. The cheap 10/6 or 1 guinea patterns have fewer stops, a simpler form of shutter and of course the lens is not so perfectly made.

(*To be Continued*)

An Interesting Retrospect

HERE is an interesting letter from a reader who has been with us since No. 1. He is Mr. W. Sutton of Erdington, Birmingham, and he says—

"Hobbies has always been to the front at every great event. As a regular reader from No. 1, I have noted the various changes, and how it has adapted itself to the various periods and has always been well received. Hobbies has, indeed stood true to the boy and man for 42 years, and many of us old Hobbyites from 1895 to 1938, are still as keen as when the first number was published.

Even now, Hobbies is to me like an oasis in the week's life, and I still look forward to Wednesday the same as I used to when it was published on Saturday. I can honestly say that Hobbies has served me well in youth, and is still doing so.

Useful Volumes

I often read the old volumes and still amid advancing years find lots to interest me. I have often been asked would I like to sell them, but no, too many happy memories are there, and it makes me happy to go over the old times. Fretwork is still my hobby and I still love to cut a design, especially some of the old ones which are very rare today.

Only a short time ago, a friend asked me about ¼-plate stand cameras, as he had one of Hobbies Imperial stand cameras that he was going to use.

This friend preferred the stand camera to the present-day type, so I spent a few evenings amongst Hobbies and found all the information I wanted for my friend, and in fact more information that I ever would find in text books. I, too, had one of Hobbies No. 2 hand cameras up till a few years ago, and always followed Hobbies week by week for my instruction.

Special Designs

Turning to fretwork again, I was delighted with the designs for the Coronation. I well remember the chair given at King Edward's Coronation—that, too, brought happy times back. The Christmas No. was splendid, and well thought out, also the 1938 Handbook.

I well remember having the first Hobbies Catalogue as it was called then. I think the design was the Eddystone Lighthouse given with it. I well remember making it up, but what a difference from that Handbook and today.

Youths of today have a lot to be thankful for if they will only think, although I find youth is slowly coming round to home pleasure, as they realise that the so-called pleasure is so flippant but provides no satisfaction.

Two youths who work at my place are always thanking me for introducing fretwork to them. They have found real joy and happiness in making and having something to show for their pleasure, and above all its lasting pleasure.

I trust that Hobbies will still continue as it has done in the past, to be a blessing and help to all of both sex."

The EDITOR'S NOTES

AS promised a little while ago, I now have the instructions on building a Canoe ready for publication and am arranging for it to appear next week. This will give you plenty of time to construct it for the summer, and with the light evenings you can complete the whole thing out of doors. It will be sufficiently light to carry about, if the river does not happen literally to be on your doorstep, but at the same time it is strong and rigid providing you have made it according to the instructions. Make sure to get your copy even if you are not wanting to make the Canoe immediately.

* * *

MANY readers may be interested to hear of a Hobbies Exhibition being held at Ipswich early in May. It has been arranged by the Ipswich Municipal Exhibition Committee and the schedule covers many classes likely to be of interest to juniors as well as adults . Entries have to be received not later than April 29th, so you have not too much time. You should immediately write for an Entry Form and particulars (mentioning Hobbies Weekly), to The Handicrafts Sec., Ipswich Exhibition Offices, Crown Street, Ipswich.

* * *

I AM glad to hear the continued progress and enthusiasm of the Edinburgh Hobbies Club. Arrangements are made for weekly visits to works or places of general interest, and a new art section and model boat section have been started. Naturally much is being done in connection with the Empire Exhibition which opens at Glasgow next month, and exhibits being sent include two model aeroplanes, a steamship, and an eight-foot square model for the Church of Scotland. Readers in and around Edinburgh should certainly join this live Club. All particulars can be obtained from the Secretary, Edinburgh Hobbies Club, 33 Lauriston Place, Edinburgh, 3.

* * *

MY postbag naturally contains a variety of interesting letters, requests, and even "snorters" from all parts. Some of the requests are certainly extraordinary and particularly from readers overseas who have but a hazy knowledge of English or business. For instance, a reader on the island of St. Lucia (one of the Windward Group in the West Indies), writes "So I kindly beg if please or want to send me a Saxaphone to play and I would pay you in a sutten amount of time whilst playing." As a saxophone costs anything between £20 and £70 I am afraid I cannot fulfil his wishes and wait for the "sutten" (I suppose he means "certain") amount which he very airily promises to pay!

* * *

THE same gentleman (I suppose he is a gentleman!) by the way, has got slightly mixed in his English also. Because, having heard of Pools and Sweepstakes, even in B.W.I., he says "If you have Sweet Stakes or in other words Tickets to sell when there is a race or any other games which there will be tickets to sell you may send some for me to sell for you." So you see Hobbies evidently appears and appeals in and to the most unlikely places and people. Which is more than can be said of a good many books and papers.

* * *

TALKING of letters, too, here is another amusing result of our Sale—a poor fellow had to walk to work! The correspondent who lives at Aylesbury, frightens us in the first case because he starts off "Hobbies Sale! XO!!? Grrr. Leaflet—more grrrrs! Why? Well the sale details arrived and I was so busy looking at it that I missed my bus and had to walk the three miles to work and was a quarter of an hour late!" Enough to make anybody angry, and I began to fear we should have a claim against us for worn out shoe leather, and loss of work time. But our friend finished up quite cheery and bright and my "hot and bothered" feeling disappeared when I read the nice things he said a little later.

* * *

WE fellows are apt to regard Fretwork as all our own domain and it comes as a shock sometimes to realise that girls and women are just as keen as we are . Yes, and just as capable I find! They are really clever with their hands, and I must give them the palm for patience in the little fiddling bits which we are sometimes apt to rush over.

The Editor

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J. H. Bennett

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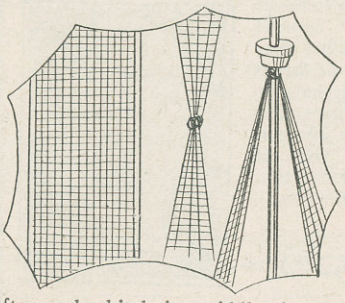
HINTS & TIPS WORTH KNOWING

For original Tips published the sender will receive a Hobbies Handy Propelling Pencil. We cannot acknowledge all those received, or guarantee to print them. Send to The Editor, Hobbies Weekly, Dereham, Norfolk. Keep them short and add rough pencil sketches if possible.

Ship's Shrouds

HERE is a tip for model ship shrouds made from Hobbies designs. Get any old table tennis net, then cut to length and width.



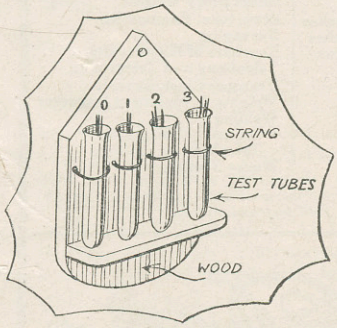
Afterwards bind in middle for slanting effects, as shown in the picture. They can then be easily put in place.—(T.J.)

Soaking Dart Boards

IN order to keep dart boards in good condition you should keep them well soaked. Generally you can't find a big enough bowl, but here is a way to get out of it. Obtain a dustbin lid and turn it upside down, and stick it in the earth. Fill up with water and put in the dart board.—(R.A.M.)

Fretsaw Holder

A VERY handy thing for the fretworker's kit is something to put fretsaw blades in. All you need are two bits of wood, a



length of string and some chemical test tubes. Fix as shown in the picture and if each tube is numbered for different sized blades, it will be very handy.—(J.H.)

Ink Eraser

IT'S very annoying when finishing a letter to find that you have made a blot or mistake. Instead of rewriting the whole letter again, apply some lilywhite bleaching agent to the error with a matchstick. Blot the surplus off with white blotting paper, and allow to dry before writing over the place again.—(L.F.M.)

Cycle Mud Flap

FIRST get an old car tube, and then cut it out the shape as required. Drill two holes at the bottom of the mudguard, both sides. Now cut out an oblong piece of tin and drill a hole in each end. Bolt the flap on to the mudguard so it hangs below as a mud preventer.—(S.G.)

THE "SCOUT" CROSSWORD

Here is the correct solution to the interesting Puzzle given in our last week's issue. Did you solve it ?

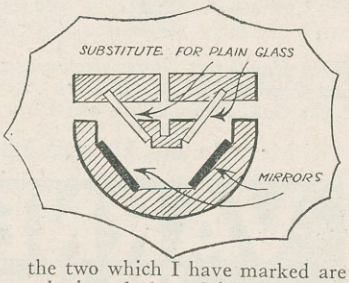
M	A	N	■	S	P	O	O	R	■	L
O	■	E	■	A	■	D	■	U	S	E
R	O	D	■	L	I	E	■	L	■	A
S	■	■	C	U	B	■	D	E	E	D
E	■	P	A	T	R	O	L	■	■	E
■	H	O	M	E	■	X	■	■	K	R
R	■	S	P	■	R	O	B	I	N	■
E	S	T	■	■	D	■	U	■	I	F
E	■	■	E	D	■	O	G	■	F	I
F	U	N	■	I	■	A	L	D	E	R
■	P	R	E	P	A	R	E	D	■	E

Using Pencil Stubs

IF you have any pencils which have worn down to about an inch long, don't throw them away, because you can make an attractive holder for them. All you need is an old fountain pen. Take the nib out, and cut about a quarter of an inch of the neck of the pen off, with your fretsaw. You will then find one of those pencil stubs will fit in tight. If the pencil does not fit, just shave a little off the end of it.—(E.H.B.)

A Coin Trick

IN the little scientific apparatus which you described in the issue of Sept. 11th last, the writer says (and shows in the sketch) that four mirrors should be used. If



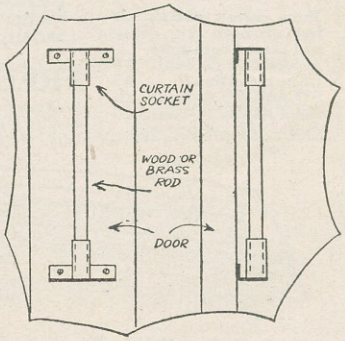
the two which I have marked are substituted for plain glass, the effect is more realistic, as then, although you can still see through the coin, you can also see the coin in a vague way. This is due to the fact that although the glass reflects, you can also see through it.—(L.S.)

Windows for Models

I HAVE built 6 Buses from design 192 Special and as they were for children to play with, I found that pieces of cellophane were as good for windows as the glass. Also it was not so dangerous.—J.A.

A Simple Handle

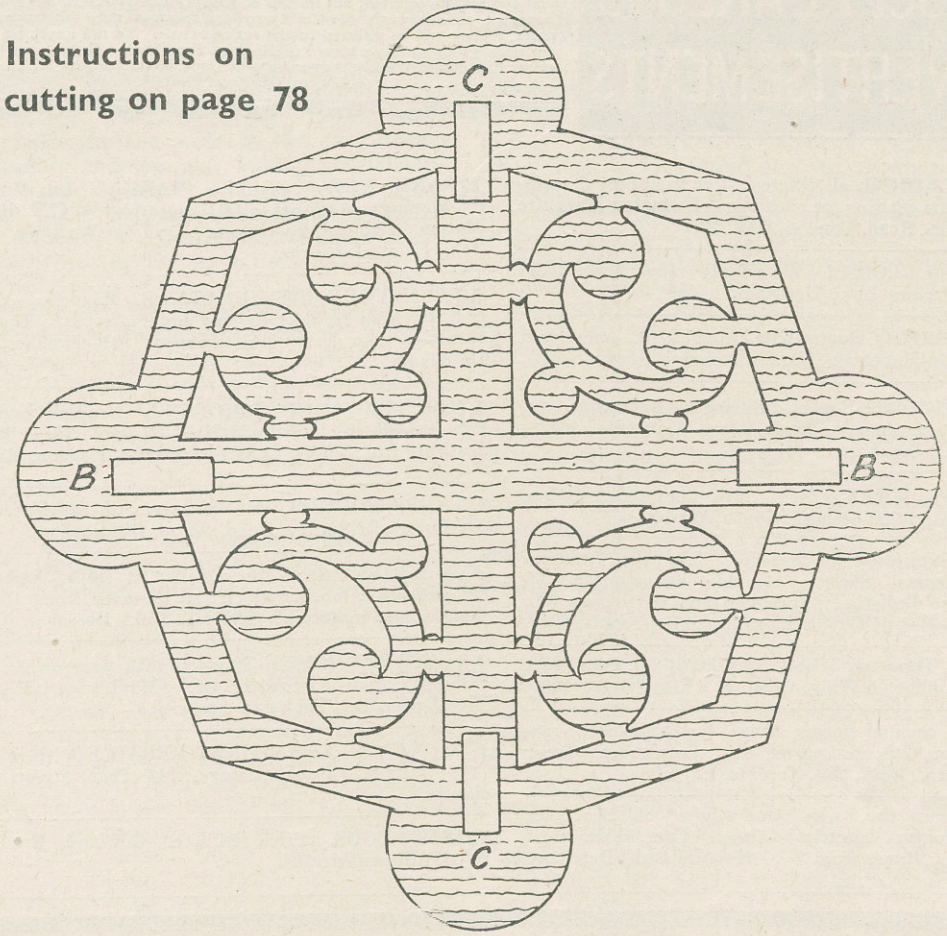
GET two curtain rod sockets of a suitable size and a length of curtain rod, either wood or brass. Brass is best if the handle is to be

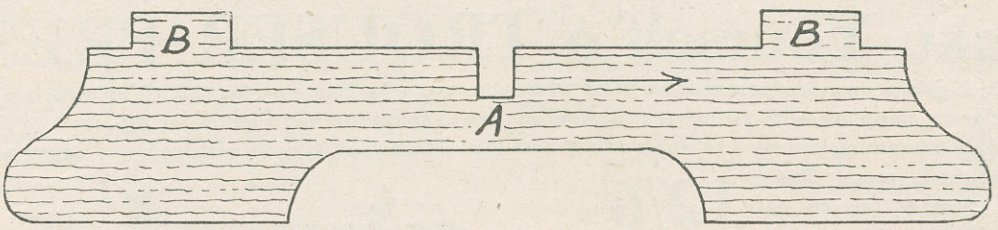


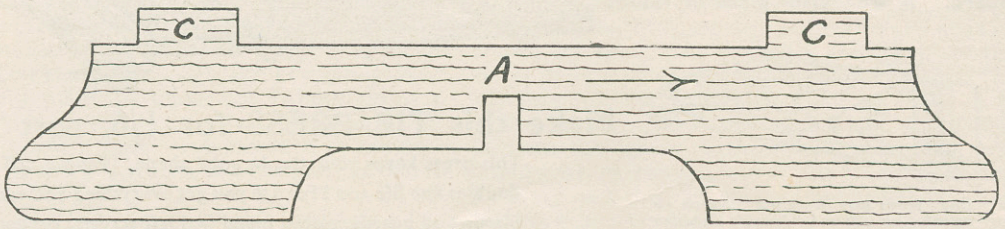
used outdoors, or fairly long, as it will not break, and fix it up in the usual way. This will make quite a good handle for sheds.—(W.T.)

Simple Fretwork Teapot Stand

Instructions on cutting on page 78







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LONELY? Then write Secy., U.C.C., 16BB. Cambridge Street, London, S.W.1. Genuine. Established 1905.

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G"OO." ARMATURES REPAIRED. Rewinding 1/8—F. George, 144 Cecil Street, Manchester.

BIRDS' EGGS. Price list free.—Gowland, Naturalist, Barnston, Wirral.

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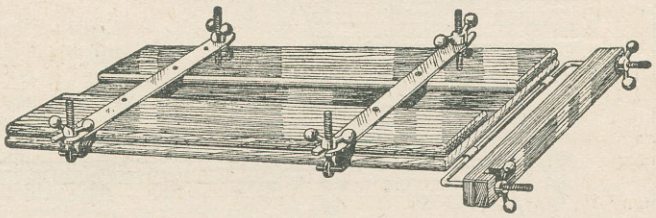
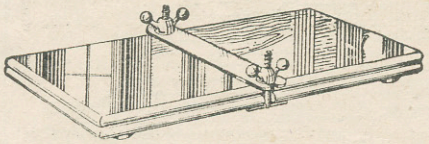
Why pay a guinea or more for a trouser press when you can make your own for 12/6! Yes, this is a real trouser press, complete, with stretcher; the kind you see in shops marked a guinea or 25/-.

We supply everything you need to make a first class job. Hardwood boards with rounded edges, plated and polished, metal fittings made to stand up to hard usage. Rubber feet are also provided for screwing to the back board. A wonderful piece of value!

12/6 *Carr. Fwd.*





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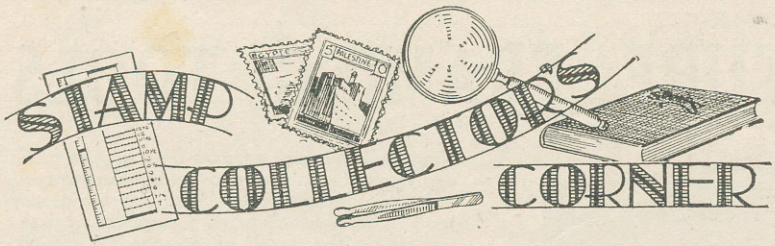


AUSTRIAN STAMPS

THERE is hardly any need to give a reason why the article this week is on the above subject. Unfortunately it is a difficult matter to make this into an article which does not savour of the catalogue type. But this is inevitable if we are to give readers something which will be of use to them.

In the earlier issues, readers may be worried by reprints. These will, of course, affect the value of the stamp, but they will not affect the interest. As far as the catalogue is concerned, they will be worried by the paper because the type of paper used when printing makes a difference to the present value of the specimen.

The first stamps were issued in 1850, and then the currency was 60 kreuzer to one gulden, the design of the stamps was that of the Arms of Austria. In 1859 the currency was changed to 100 kreuzer to the gulden, and the design had as the centre a portrait of Emperor Joseph I, and in 1860 the Arms of Austria.

All the above are more or less difficult to get, so the first illustration is of the type which all readers should be able to show in their collections.

Actually there are a number of minor variations of these stamps, so you should be able to take out your magnifying glass and spend some time looking through your duplicates and find differences. The place to look is at the ornament in the bottom left-hand corner, and also by using your perforation gauge you should obtain a lot more.

The next type illustrated is one which may have puzzled some collectors as there is a certain difficulty in finding out where the stamp should go. However, by looking at the illustration this should help, for again there are many different perforations. That is in the 1863 issue.

Now look at the 1890 stamp. This is shown because you will have to refer to the illustration quite a number of times if you are to follow the next few lines properly.

For deciding that a stamp is of this set, look at the numerals; they are printed in black. In 1891 the shape of the frame was changed to a square, and the numerals were placed in six-sided tablets in the corners—the tablets white and the numerals black.

In 1892 the design was the same as that shown for 1890, but the currency was changed to 100 heller equals 1 krone. The 10 h. to 30 h. had a square frame, with black letters in squares in the corners, the background of the squares being as in the illustration.

The 40, 50 and 60 h., had a square frame with six-sided tablets for the figures, but in this case the tablets were not white but shaded.

Now to see if you have any of the stamps issued after 1901, but of the same design as we have been writing about. Hold a stamp at eye level and look along it.

Then you will see that if your stamp was issued after 1901 it will have three shiny bars across it. These were stamps overprinted with bars of varnish in order that if anyone tried to rub out any marks so they might use the stamp a second time, they would rub out the shiny bars and the postal authorities would be able to tell in this way.

Now for the 1904 issue. The tablets for the values were, round for the 1 h. to 6 h., square for the 10 to 30 h., and hexagonal for the higher values.

This time, however, the round and the square tablets are white and the numerals coloured and black respectively, while for the six-sided tablets the figures are white and the ground coloured.

Lastly for this design we have the 1906 issue in which the whole is of one colour, figures and design—without shiny bars.

Well, that lot may seem a little complicated. It is, but it is quite worth the time spent in sorting out the various issues and the search through the duplicate box. Just to see if you have let any get into that box which ought to be in the collection.

Now we come to the changes of design which should prove a little more interesting.

The year 1908 was the sixtieth anniversary of the Emperor's accession, and to commemorate this, Austria issued a set of stamps bearing various portraits such as that seen on the fourth illustration. This is of Charles VI.

Up to the 35 h. the frames are practically the same, so that you may recognise the others by this. Above that value the stamps are larger, showing Francis Joseph I. in various uniforms. The 2 and 5 kronen have pictures of the Schonbrunn.

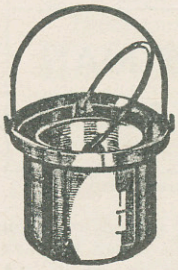
Two years later, the 80th birthday of Francis Joseph was commemorated by a further set. The design was the same but had the dates 1830 and 1910 above and below respectively.

We will leave the various charity stamps to be discussed later, so the stamps from now on will not be in quite the correct chronological order. But as the charity stamps are of peculiar interest when taken together, this disadvantage is advisable.

(To be Continued)

The issue of 1867 — look for corners and perforations *The issue of 1883* *Use this for reference — the 1890 issue* *The 60th anniversary of Emperor's accession*

PICTURE FRAMING TOOLS



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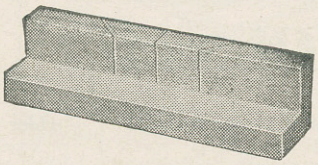

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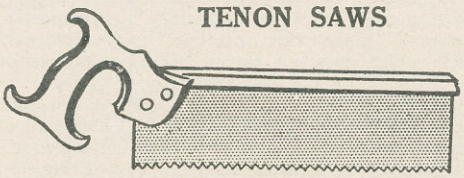
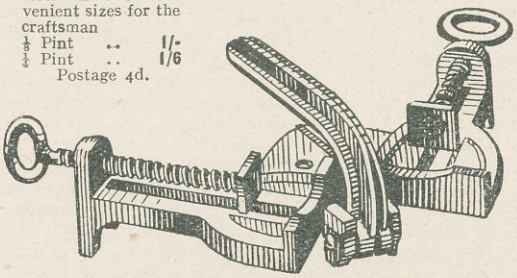
A hardwood block, 9in. long. Just the thing for small mouldings, price **9d.** post 4d. Other mitre blocks with metal saw guides, **2/6** and **3/6.** postage 6d.

Next time you want a frame for a picture make one yourself. It's easy and straightforward—if you have the right tools. And you save money too! Hobbies tools bring picture frame making within the reach of everybody's pocket. Make a start on your first picture now!

TENON SAWS



For the small mitre block a 10in. saw is required. This with iron back costs only **2/6,** whilst a 12in. is **2/9.** A 14in. saw of superior quality suitable for the mitre cramp costs **5/-,** postage 6d. on each.



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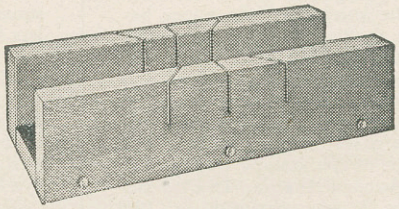

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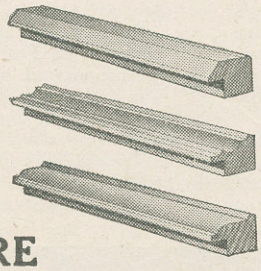
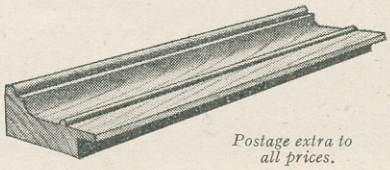


PICTURE FRAME MOULDING



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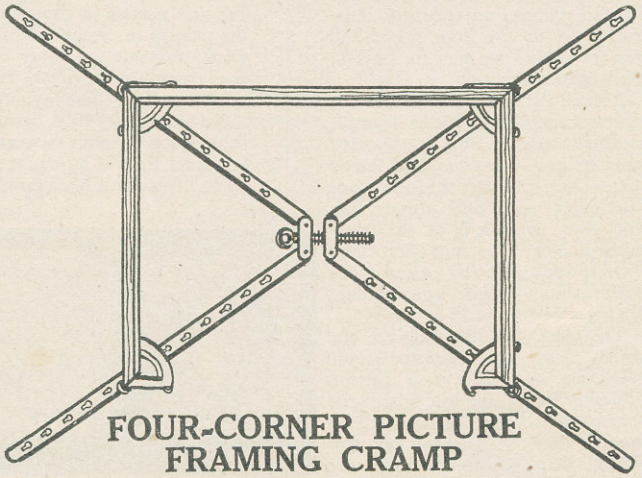

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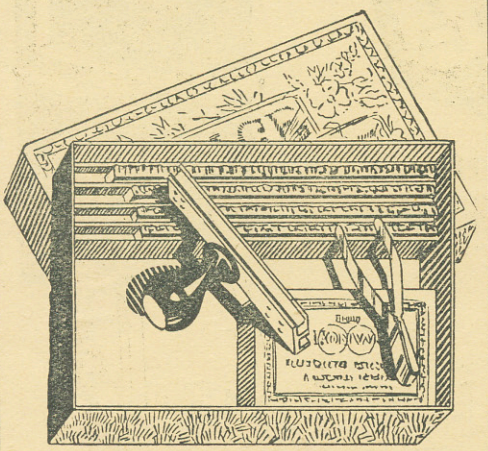

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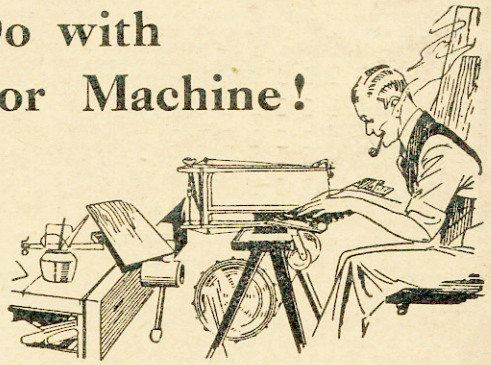

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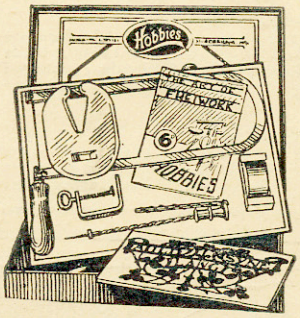

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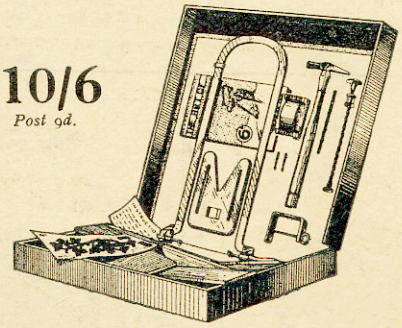

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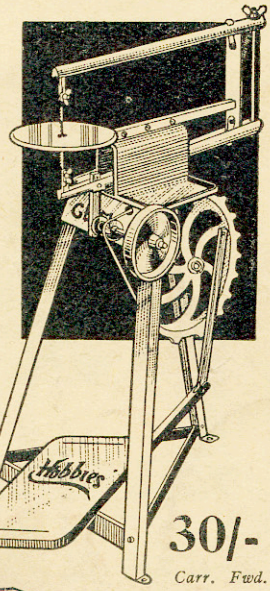

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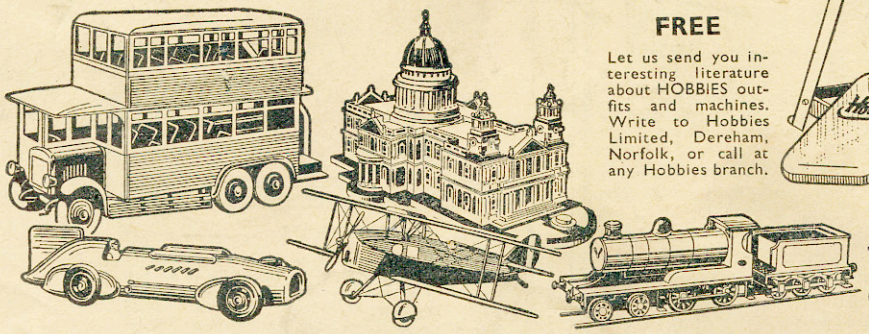

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